



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/779,442	02/13/2004	Ho-Keung Lee	Lee 2 (LCNT/126171)	8970
46363 7590 01/09/2008 PATTERSON & SHERIDAN, LLP/ LUCENT TECHNOLOGIES, INC 595 SHREWSBURY AVENUE SHREWSBURY, NJ 07702			EXAMINER PASIA, REDENTOR M	
			ART UNIT 2616	PAPER NUMBER
			MAIL DATE 01/09/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/779,442	Applicant(s) LEE, HO-KEUNG	
	Examiner Redentor M. Pasia	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>02/13/2004</u> | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Amendment*

Applicant's amendment filed on October 15, 2007 has been entered. Claims 1, 7-12, 15, 17 have been amended. No claims have been canceled. Claims 1-22 are still pending in this application, with claims 1, 7, 13 and 17 being independent.

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-6, and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "*the communication path element*" in page 2, lines 12-13 in the amended claims. There is insufficient antecedent basis for this limitation in the claim. However, in the rejection of the claims as stated here in this office action, the examiner interpreted this claim limitation as "...*a next network element of the communication path...*"

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Bakshi et al. (US 6574663 B1; hereinafter Bakshi).

As to claims 1 and 7, Bakshi shows a method of analyzing network characteristics (abstract) comprising the steps of: querying a network element in a communication network for local network information (Figure 2, step 250); receiving the local network information from the network element in response to querying (Figure 2, step 260), the local network information comprising one or more items selected from the group including topology information, connection information, and performance information (col. 5, lines 45-47; col. 4, lines 23-49); analyzing the local network information received to map a communication path established in the network (Figure 2, step 270); responsive to the local network information received and the communication

Art Unit: 2616

path mapped in the analyzing step, selecting a next network of the communication path element for querying; and if the next network element has been selected, iterating the method from the querying step for the next network element (col. 5, lines 46-64).

Bakshi further shows a computer having memory for storing a software program that, when executed by a processor, causes the computer to perform a method (Active Topology Server 120).

As to claims 2 and 8, Bakshi shows the step of receiving a notification signal from one or more network elements, the notification signal indicative of a network event, and wherein the step of querying is initiated in response to receiving said notification signal (Figure 4).

As to claims 3 and 9, Bakshi shows the step of determining network capacity using communication path data from the analyzing step (Figure 2, step 270; col. 4, lines 23-55).

As to claims 4 and 10, Bakshi shows the step of determining network performance using the communication path data from the analyzing step (Figure 2, step 270; col. 4, lines 23-55).

As to claims 5 and 11, Bakshi shows the step of detecting network faults using communication path data from the analyzing step (Figure 2, step 270; col. 4, lines 23-55; col. 5, lines 62-64).

As to claims 6 and 12, Bakshi shows that the topology information includes a routing table and wherein the connection information includes a connection table (col. 1, lines 30-32; col. 5, lines 45-47; col. 4, lines 23-49).

As to claim 13, Bakshi shows a method for analyzing network characteristics (abstract) comprising the steps of: receiving a notification signal from a network element, said notification signal indicative of a new communication path set-up by the network element and including circuit identifier information (Figure 2, step 210-240; col. 5, lines 15-34); querying a network element in a communication network for connection information (Figure 2, step 250); receiving the connection information from the network element in response to querying (Figure 2, step 270); comparing the connection information with the circuit identifier information to determine a match condition; if the match condition occurs in the comparing step, querying the network element for routing information (Figure 2; steps 210-250; col. 5 lines 46-52); receiving routing information from the network element and analyzing the routing information received to map the new communication path established in the network (Figure 2, step 270); selecting a next network element to query along the new communication path; if the next network

element has been selected, fetching from the received circuit identifier information associated with the next network element and iterating the method from the step of querying for the next network element(col. 5, lines 46-52; Figure 2).

As to claims 14 and 15, Bakshi shows the step of storing the communication path established through the communication network (Figure 2, step 270; col. 4, lines 23-55).

As to claim 16, Bakshi shows the step of storing the communication path established through the communication network (Figure 2, step 270; col. 4, lines 23-55).

As to claim 17, Bakshi shows an apparatus for analyzing network characteristics in a network including a plurality of network elements interconnected together to form a communication network (Figure 1B, Active Topology Server), the apparatus comprising: means for querying a network element in the communication network for local network information, the local network information comprising one or more items selected from the group including topology information, connection information, and performance information; means, responsive to receipt of the local network information, for analyzing the local network information received to map a communication path established in the network; and means, responsive to the local network information received and the communication path mapped in the analyzing means, for selecting a next network

element of the communication path for querying; wherein the means for querying is responsive to a notification that the next network element has been selected (this part of the claim is rejected using the same reasoning set forth in the rejection of claim 1).

As to claims 18, 19, 20, 21 and 22, these claims are rejected using the same reasoning set forth in the rejection of claims 2, 3, 4, 5 and 6, respectively.

### ***Response to Arguments***

Applicant's arguments filed October 15, 2007 have been fully considered but they are not persuasive.

As to claim 1, applicant argues that Bakshi et al. (US 6574663 B1; hereinafter Bakshi) does not teach or suggest at least a step of *"analyzing the local network information received to map a communication path established in the network..."* The examiner holds his previous rejection as stated above (Bakshi: Figure 2, step 270). Figure 2 is described by Bakshi in col. 5, lines 15-64. Figure 2, step 270 is discussed in col. 5, lines 45-52, 55-58 with relation to the flowchart in Figure 2. Col. 5, lines 45-47 states that, *"The active topology server 120 receives the Capability Packet and updates its service database and active topology map accordingly. The above process repeats according to a temporal sequence (e.g. periodically) for the same active device and all*



*other active devices in order to keep the databases in the active topology server 120 current." Also in relation to the Active Topology Server and the topology map, col. 4, lines 30-49 of Bakshi shows that "The active topology server 120 also maintains a general topology map of the entire network 110, including interconnections of all active and passive devices. The active topology server 120 can use this information to determine the best path between any two devices, specifically between any active device and any passive device, for a selected link parameter. The active topology server 120 also maintains an active topology map to indicate current connectivity among all active devices in the network 110 and the software and hardware resources or configurations in each active device. The information about the hardware may include the type of the processor, available RAM and space in the hard drive, the speed of communication ports, and so on. The information on the connectivity part of this active topology map may be derived from the general topology map." Furthermore, Bakshi explains the use of the term "active." Col. 2, line 43 to col. 3, line 4, shows that "It is desirable to be able to reconfigure a network at least in part by reconfiguring and reprogramming certain linked devices to meet the changing needs of existing applications installed in the network, or to install new applications to expand the services of the network. Such reconfiguration may be accomplished without interrupting the normal operation of the network. Such a network will be referred to as being "active" in this disclosure. One aspect of this disclosure is the recognition that devices linked to an active network may be divided into at least two different types, "active" devices and "passive" devices, based on their programmability during runtime. An active device can*

Art Unit: 2616

*be configured and programmed to perform its existing service and to provide modified or new networking services while it is operating and connected to the network. This may be done by sending a mobile agent, i.e., a set of application-specific software routines and instructions, from a linked device (e.g., a server computer) to the active device. The active device executes the mobile agent to modify one or more of its existing functions or to install a new application. A reprogrammable server and a reprogrammable router are examples of active devices."*

As to claims 7, 13 and 17, the applicant bases his arguments on the same reasoning set forth in the argument of claim 1. The examiner bases his reasons for the arguments using the same reasoning as stated above in the explanation of argument in relation to claim 1.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Bondi (US 5710885) – see abstract.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2616

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

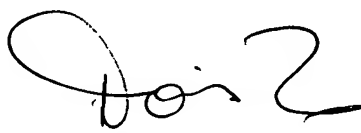
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Redentor M. Pasia whose telephone number is 571-272-9745. The examiner can normally be reached on M-F 7:30am to 4:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris H. To can be reached on (571)272-7629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Redentor Pasia

  
DORIS H. TO  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600